

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: John M. Smith III, et al.

Serial No.: 10/696,484

Filed: October 29, 2003

Confirmation No.: 6978

Examiner: Erma C. Cameron

Art Unit: 1762

For: **TREATED INHERENTLY FLAME RESISTANT POLYESTER FABRICS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**DECLARATION OF JOHN M. SMITH III**

1. I am the same John M. Smith, III, who is a co-inventor of the subject application.
2. I understand that the examiner in this application has rejected the claims as being directed to an invention which would have been obvious from the disclosure of Japanese Patent JP 07-157977 in view of a article entitled "A Comparison of Anti-Microbials for the Textile Industry" of White, et al. A similar rejection was also made with respect to the disclosure of European Patent 503114 in view of the White article.
3. The Japanese and European patent disclosures do not disclose the use of an anti-microbial finish, and the examiner cites the White article's discussion of anti-microbial finishes. As to both Japanese and European references, the examiner concludes that it would have been obvious to one of ordinary skill in the art to have used the anti-microbial organosilanes of White in the treatment composition of the respective Japanese or European Patent because of the need for anti-microbial properties on a fabric exposed to the weather and wetness on the lightweight tent or canvas fabric of the Japanese patent or the awning fabric of the European patent.
4. This conclusion is factually incorrect. First, as is noted in page 2 of the subject of this application, the manufacturer of inherently flame resistant polyester fibers has specifically warned against adding chemical treatments to the fabrics because of the potential loss of the

flame resistant property. That passage particularly refers to warnings about an acrylic resin, silicone and fluorocarbon compounds. These warnings to those of ordinary skill in the art teach away from the addition of various compounds.

5. In particular, the application of an excess concentration of an organosilane anti-microbial finishes can impair the ability of what would otherwise be an FR fabric to pass NFPA701 tests, particularly because melt dripping. Thus, it is incorrect to simply assume that it would have been obvious to add the anti-microbial organosilane finish of the White reference to either the European or Japanese products.

6. The office action also cites a US Patent 4,842,766 to Blehm, et al., with particular reference to its example 5 as disclosing the use of an organosilane microbial on a polyester fabric. This reference is no more pertinent than the White article. As with the White article, the simple addition of an anti-microbial finish to an otherwise FR fabric is not straightforward. Adding the compound to the treatment composition does not simply add the property to the fabric. As additional properties are attempted to be added, the properties already existing can be altered or negated. That is the case with the addition of the anti-microbial onto the FR property of the substrate fabric. The antimicrobial can degrade the FR property. Thus, it is simply incorrect to say that it would have been obvious to add an antimicrobial compound to the finishing baths of either the Japanese or European fabrics.

7. Moreover, the fabrics of the invention has had substantial commercial success. The fabric is largely used in hospitals, a very demanding situation, and purchasers for hospitals closely scrutinize the properties of items purchased. Applicant's assignee's customers are vendors of hospital supply products such as the draperies used in hospitals and bedding in hospitals. The vendor carefully monitors the properties of the products to be sure they meet the hospital standards. Since introduction of applicant's products to this specialized market three years ago, the number of square yards of the fabric has grown to 400,000 square yards in fiscal year 2007. This product has not been the subject of extensive advertising or other promotional efforts, other than what has been needed to point out and demonstrate the properties that this

unique inventive fabric has attained. The sales growth to this line indicates that there is a demand and market for the product obtained using the claimed process. The Blehm reference issued in 1989, the Japanese disclosure was published in 1991, and the European publication took place in November 1992. If the invention had been, in fact, obvious for this period of time (ten years) since all these tools were available, textile companies in the mid-90's would have taken advantage of the market that applicant has found and demonstrated, since hospitals have long had a need for fabrics that have flame retardant properties, anti-microbial properties, and soil or water repellent properties.

8. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,



John M. Smith III

Date: January 3, 2008  
MacCord Mason File No.: 2250-13A